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Journal of the CACTUS AND SUCCULENT SOCIETY of America

1800 Marengo St., Los Angeles, Calif.

A monthly magazine devoted exclusively to Cacti and Succulents for the dissemination of knowledge and the recording of hitherto unpublished data in order that the culture and the study of these particular plants may attain the popularity which is justly theirs. "The Cactaceae," by N. L. Britton and J. N. Rose, has been adopted by this journal for purposes of identification.

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VOLUME I.

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FOREWORD

By DR. ARTHUR D. HOUGHTON

President of the Cactus and Succulent Society of America

MANY years ago a neighbour who specialized in teaching backward children brought me a beautiful purple flowered cactus to name for her. The first book available was an old botany with a fairly good picture of the plant I held in my hand; underneath was the title *Mammillaria grahamii*. The plant so mis-named was *Opuntia basilaris*. Feeling challenged my next step was to look up reliable literature on the subject of the Cacti. There was no reliable popular literature on the subject and only fragmentary and hard to get at scientific books. In German there was *Forsters Handbuch* and in English *The Botany of the Boundary* by Engelmann. *Blanc's Catalogue* and some German catalogues were the sole equipment of the collectors of that day. As this family of plants is strictly limited to the American Continent I felt that there would be potential value in making a real collection of these plants. Moreover I was convinced that much new work was needed before anything approaching an accurate monograph on the subject would be possible.

I decided then that my function and contribution should be a collection. Soon exhausting all the local collections by trade and purchase, I then imported a great amount of material. Then using Dr. Engelmann's account as a basis I travelled thousands of miles collecting in the Western United States and Mexico. Soon I had amassed a very complete collection.

Prof. Schumann's work in German beautifully illustrated came out in 1908 but its methods of classification were far from satisfactory and of course not available to those not familiar with his language.

In 1919 Drs. Britton and Rose published their monumental monograph in English. The classification is the very best that could have been done with their paucity of material. A perusal of this work shows how much of it was made possible by the collections of amateur fanciers. That's where we come in.

If the last word had been written on the Cacti, we would no more waste our time on them than on collecting used neckties or postage stamps. Notwithstanding the enormous collection of facts and material, the number of incomplete descriptions as well as the number of unrecognized species is quite large. One of our reasons for existence as a magazine is to encourage collections for use by expert taxonomists in the publication of newer and fuller works on this subject.

For some, the collection is a business as legitimate as the nursery business or the business of furnishing standard rats for college studies. To some it is merely an aesthetic pleasure similar to owning a collection of orchids or roses. To others collections

appeal in their diversity of form and its application to the understanding of evolution. Some see locked up in these peculiar plants stores of potential undiscovered secrets of chemistry or biology to be opened by the key of the researcher. To others there is only the misers collecting joy "The hungry Jew in wilderness rejoicing o'er his manna." Each has his rights, even the latter, for his collection will enrich science when his body has enriched mother earth. Our magazine urges efforts to name plants correctly; propagation by cuttings; grafting; raising seedlings; hybridizing; exchanging mutual help in naming and classifying; cooperation with scientists, educators, research institutions, government bureaux and quarantine officials both domestic and foreign with a view to making available material for propagation of knowledge in our favorite field; the conservation of our wild life; and finally, the getting together socially of the peculiar minds though some of us may be "mute inglorious Miltons" who love the works of nature in her hotter and dryer moods.

Members of the Cactus and Succulent Society of America this is your magazine. You are running it. There are no stockholders—No inside ring. You must make it a success if such it is to be. It takes work; do yours.

1 1 1

ROOTING CACTUS PLANTS AND CUTTINGS

By ERNEST BRAUNTON

As there seems to be a great difference of opinion among collectors in regard to the proper soil in which to propagate and grow cacti and other succulents of like nature, a few words from a cactus collector of long experience might be of some assistance to the amateur who is halting between two or more opinions. I have experimented with all classes of cacti, in every different soil advocated by cactus growers in general, and find that pure white sand neither too coarse nor too fine, is the best for all propagation and rooting.

It should be made damp, not wet, before planting your cuttings, and kept dry most of the time without watering more than once a week at most until cuttings are rooted. Some of the few exceptions to this rule are noted below.

Good drainage in all cases is essential to success. I have found *Pilocereus* cuttings the hardest to root, I allow them to lie for two or three days with their butts to the sun in order to heal them, then dip into powdered charcoal, and plant in perfectly dry sand, and do not water until roots have started. When watering, a very weak solution of lime water will benefit *Pilocereus*, but does not benefit the majority of the other genera.

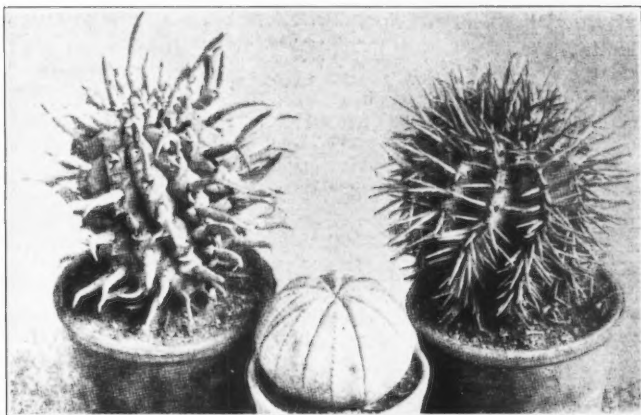
Most *Echinocereus* will stand but little water until well rooted. By following this treatment, I have found it easier in many cases to root cuttings than to start new roots on plants. In rooting plants of these varieties, the same rule should be followed, after cutting off all old roots. Some varieties, as *Echinocactus horizonthalonius*, *uncinatus*, and *crispatus*, with a few others, will strike lateral roots from the old ones, even after being out of the ground for three or four months, but it is best to cut off all roots from these as well as the others.

Flat leaved *Opuntias* as a rule will root very readily in almost any kind of soil, and in any degree of moisture. No rules can be laid down for any particular branch of the cactus family, as the genera approach each other so closely as to baffle, for a time, the best botanist. Each plant may need treatment slightly different than any of the rest, and the closest study of each individual plant is necessary to success. I do all my propagating and rooting in lath houses, where they get partial sun.

The subject of soils for growing of rooted plants will be treated in next months issue of the Journal.—Ed.

EUPHORBIAS

By G. A. FRICK



Euphorbia tuberculata, *E. obesa*, and *E. horrida*; three of the rarest Euphorbias found in the Transvaal, So. Africa.

I have often been asked by persons visiting my greenhouse: "What sort of plants are those? Do they bloom? Well, such peculiar growth. Are the flowers fragrant? Of what country are they natives? Do they possess any valuable properties? Are they a hardy plant, or do they require a great deal of attention to be successfully grown? Are all of the species leafless?" And many more questions when the eye is attracted by the Euphorbia. This species of plant is attracting much attention among the admirers of cacti, and there being little or nothing written on them in the English language, an article on the Euphorbia should be of interest to the readers of the *Journal*.

The Euphorbia is named after EUPHORBUS, Physician to Jube, King of Mauritania. Euphorbus was a famous Trojan (inhabitant of ancient Troy) and the first who wounded Patroclus, whom Hector killed. It is almost impossible to ascertain the exact time they were named Euphorbias, but a careful search has revealed the fact that King Jube I, lived about a half century before Christ; his son, King Jube II, died A. D. 17; it is not definitely known which King Euphorbus attended.

Euphorbias are not cacti, yet in appearance many of them so closely resemble a cactus that most collectors of the latter plants include them among their collections. There are about 850 species with a world wide distribution, the majority being native to South Africa. Several grow in tropical Mexico while that odd appear-

ing plant, japlopa, grows in China and the Philippine Islands. In Madagascar where *neriifolia* is native, it is grown in hedges along property lines making a fence that fairly shouts "keep out." There are a few grown in the United States while *lactea*, one of the most striking plants of the genus, is native to the East Indies.

Lactea is tree shaped with a woody trunk and cactus-like branches growing 15 to 20 feet high. The branches occasionally take on odd but beautiful growths known as *cristates*, caused mostly by hail striking and wounding the young growth and in the healing of these cuts the odd shapes take form. They are rarely found and when cut from the mother plant will continue their *cristate* contortions if all new growth showing a tendency to revert to the original shape is cut off. *Lactea cristates* are the most outstanding plants in any collection, there being no two alike, and their peculiar twists and turns making each plant exclusive.

An advantage in raising Euphorbias is that they are rarely, if ever troubled by insects or any other destructive fungi. People not familiar with them call them milkweeds, because a wound or a pin prick will cause them to exude a milk-like juice which is acrid poison which smarts in an open cut or sore. It is sticky and when touched by the tongue puckers the mouth like an unripe persimmon. I have placed the scourge of California, the Argentine ant, in this juice and have never seen one that lived long enough to struggle out of his bath. Mealy bug, rust, and

scale, all of which are destructive to other plants, when placed on Euphorbias drop off in a day or so apparently dead. In some of the worst insect infested collections of catus and succulents I have ever visited the Euphorbias were always clean, healthy, and growing nicely with these destructive plant enemies all around them. There are some cacti in the Mammillaria group that also have a milky juice; this, however, does not divorce them from that family, neither does it give them the immunity from pests that the Euphorbias enjoy, since their juices evidently are not poisonous.

There is a wide difference in the growths and forms of the various species. For instance, splendens looks very much like the occatillo with its robust spines and has a somewhat similar flower blooming very nearly all year around. It is erroneously known by most people as the Crown of Thorns, will stand rough treatment,

and can be trained into any form making it a desirable climber. Obesa has all the appearance of a gourd; pendula is a vine; globosa resembles a handful of dried walnuts; xylophyloides could be mistaken for a Phyllocactus, and meloformis for an Echinocactus; while the name ceriformis tells us it has the appearance of a Cereus. Tirucalli looks like coral and is the most common Euphorbia to be found among collections.

Alwin Berger's book "*Sukkulente Euphorbien*," in the German, is a manual of the most cactus-like species, and at present is the only available work published. Mr. Berger is at this time making corrections and translating it into English.

In next months issue of the Journal will appear the second article of this series on care and propagation of Euphorbias.—Ed.

EXHAUSTED SOIL AND REPOTTING

By E. N. MERKEL

When you see a plant at a "stand still," looking sickly with no signs of growth it is nearly always because the soil is exhausted. The plant has used up all the food contained in it and it is necessary that you supply fresh soil or fertilizer. For all cacti fresh soil is the best, although you can apply fertilizer to very old and large specimens to advantage by top dressing and in liquid form, as well as in the soil.

The smaller and younger plants do not like much fertilizer but will be benefitted with about one-fifth of old well rotted manure added to the soil.

I have been very successful with equal parts of good rich loam, white sand and peat, for nearly every variety of the cactus family. I have this soil well mixed and put through a sieve of half-inch mesh for pots ranging from two to six inches in size, and for larger pots merely picking out the largest lumps and stones the soil may contain. Have the pots well drained, using pebbles or broken pots, always using the size pot that is just large enough to hold the roots well spread (not in a bunch). To use a pot that is too large is not only injurious, but it makes the plant look small and poor.

When a cactus has very few roots it is best to fill your pot three fourths full with ordinary mixture and placing on top of this, so that it will be directly under the plant, pure sand or charcoal. It will make roots in this which will strike through into the soil.

Never let the soil get into a stagnant, wet condition, as it is sure death to a cactus, while on the other hand, too dry is just as bad for Phyllocactus, Epiphyllums, and slender growing Cereus, but a few Echinocactus, Echinocereus and Mammillarias, etc., will stand almost any amount of dryness. Most lovers of cacti have a certain number of these plants to lose before they learn to keep water from them in the dormant season, and I may add, that it requires more judgment to water a cactus than any other one operation we perform in caring for them.

Cacti planted in fancy glazed pots, do make a very pretty appearance, but should be given special care in watering as they do not dry out as readily as the ordinary flower pot, and cacti must have good drainage.

In ordering plants this month, we request you to favor our advertisers feeling confident that by mentioning the *Journal* all orders will receive prompt and careful attention, and the *Journal* will be recognized as a valuable advertising medium.

Send us items of interest on cacti and succulents for publication. It is your privilege, so avail yourself of the opportunity and let us hear from you.

LOPHOCEREUS SCHOTTII

By G. E. BARRETT

Dear Henery. By this time you will have got that box of funny cactus which I sent you. Its the same stuff them rich folks up in Hollywood plant in their dooryards and think its pretty. Now I want you to take special notice of that tall star shaped cactus, I mean the plant which has the long white bristles instead of spines, thats the kind I had so much trouble findin, and Im' goin to tell you just how to find it so as you can git it yourself next time cause I am through with that country.

Well you remember that old flivver I used to drive? I takes the fenders off, also everything else what wasent necessary to make it go, then I fits the wheels with the biggest tires in town.

I puts big gas and water tanks on the runnin boards cause I knew by the maps that there want many gas stations in the country where I was goin.

You will remember the Professor said this special kind of cactus didnt grow in the U. S. but that it came from way down in Mexico, he called it *Loco serus schotti*, or something like that, but old Uncle Bill told me he seen cactus with long white hair instead of spines, and he seen it on the border right down in Arizona, course that was back in the 60s but it might be there yet and I was goin to find out.

Well I loads the old flivver up with enough necessities of life to last a couple of weeks includin gas enough to take me to South America. The neighbors all thought I was crazy as I steamed down the road with that apparatus, you see I had took the muffler off, and had changed the gears so as it could climb better, and it was a plenty noisy machine.

I wont bother you none with the details of gettin over into Arizona cause it was just plain

sailin over regular roads. But after I gits over to the middle of the state I hits a little burg without no name I turns south and leaves all civilization behind. I travels for a half a day over a old road what leads to a empty copper mine up in the hills. This mine bein the end of the road I simply takes off in a southerly direction as the sailors say. I knew that it was a good 50 mile to the

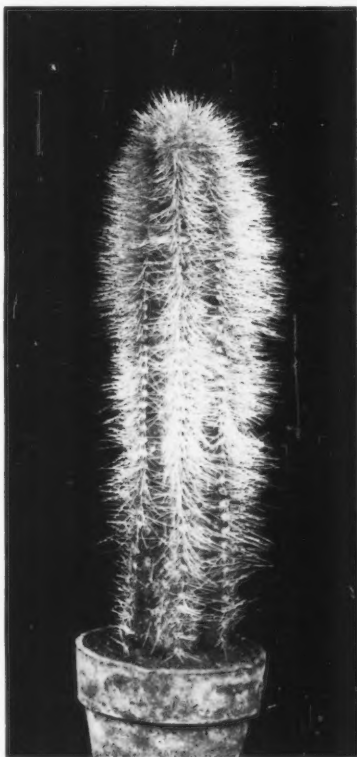
border yet, and that goin wasent any too good, so I just takes my time dodgin around through the sage brush and cactus headin as near south as the lay of the country would let me.

There was a broad level valley headin almost in my direction so I follows it many miles, sea-sawin back and forth dodgin cactus and brush, sometimes havin to turn back a ways to git acrost some arroyo. (which is a creek without no water).

Toward sundown I seen a big lake ahead and not knowin just how I was goin to get around it I made camp for the night. Guess I forgot to mention I had took my big airdale dog "buck" along for company, which I sure needed that night for I had camped in the lonest place in the world. I didnt know it could be so still, not a bird or a bee within miles.

If you ever need a quiet place in which to recuperate just go down there and absorb it. I musta been considerable worried about gettin

acrost that lake cause I dreamed about it that night, seems that I was tryin to go over the water with them big tires and that I got stuck, and I got drowned several times before morning. I was much relieved when I woke up and seen the car still there and that I was still alive. I gets a early start toward the lake where I was goin to fill my tanks and try to find some way round it. Well sir when I got down to that lake I gits the



Flowering branch Lophocereus Schottii

biggest surprise of my life, it want no lake at all, that is there want no water in it, it had all dried up. I drove right out on the lake bed and found it was as smooth as glass and as hard as cement.

Well even if I didnt git my tanks filled I want much dissappointed for I started traveling right then. Here was one place where there want no speed limit, no cops to stop you, and I sure took advantage of it, it want no time till I was acrost to the other side altho I guess it musta been 20 miles across, course I couldn't swear to the distance cause I had took my speedometer off so as I could carry more water.

The whole aspect of the country had changed at the south end of the lake. All the plants now were new varieties, there was more different kinds of cactus than I had ever seen in one place. There was "prickly pear cactus with purple leaves what didnt have no spines, but dont never touch em, they got em alright but they keep em hid til you touch em then they jump out at you. (Op. Santa Rita). Then there was another kind somethin like this but had long needle like stickers all over the edge of the leaves. (Op Macrocentra). Well durin the next few hours I seen more different kinds of cactus than I ever knew existed. There was a cholla cactus what was all red and purple instead of being green. (Op. Versicolor). Then there was the most beautiful barrel cactus I had even seen, it was almost purple instead of being green. (E. C. Covelli), and the ground was covered with great mats of a creeping cholla not over 2 or 3 inches high. (Op. Parrishii). Now I was gettin into the country of the giant cactus also, (Carnegia Gigantea) and another few miles took me into a regular forest of them. I had to do some tall figurin to navigate the car through this district, but finally hit on the plan of driving up a dry creek bed where there wasent no plants growin. This forest of giant cactus reminded me of bein in the pine woods, when the wind blew through the spines on em, it sounded just like the wind goin through pine needles. They was about as tall as pine trees and so close together that it was almost shady.

Late that afternoon I lets Buck out of the car to git some exercise and he want out 5 minutes till he started a scrap with something or other, so I grabs the gun and went off in the brush where he was raisin such a rumpas, from the noise he was makin I thought he had found a elephant or somethin.

I finally gits there and can you believe me he had "treed" the biggest bob cat I ever seen. At any rate you would call it "Treed" in your country, but there want no trees in this country so the old cat done the next best thing, he took to

one of them giant cactuses. Can you imagine a big cat climbin to the top of a 40 foot cactus. The cactus has 3 inch spines sticking out in all directions and they aint over a half inch apart either. Still there was our cat standing on the top lookin first one way then the other, and spittin at the dog. Well sez I to my self "heres'



"Pictures don't lie"

a chanst to git a real photograff", somethin folks dont git to see every day, so I trapes back to the car and gits my picture takin apparatus, leavin the dog to keep friend cat on his roost. Well I takes a couple of snaps at him from different positions to make sure one of em would be good, and I am enclosin you one of em just to show you I aint exaggeratin any about this. What became of the cat? Oh yes—his fur adorns the coat of the Missus. You see them cats is considered undesirable citizens, they kill deer, young stock, and do lots of damage, so I figgered the world would be better without his presence, besides old Buck was just dyin for a scrap, so with a little time and plenty of rocks I succeeded in coaxin him off the cactus and you should have seen the mixup, I tried to git another picture but there was too much action. Buck gits his nose pretty well chewed up but finally wins the

argument so I skins the cat and we are on our way.

Now I was slowly wendin my way back and forth through the giant cactus. Who said the desert was barren? There was more kinds of plants here that I had ever seen in one place. The palo verde trees here was absolutely beautiful, the bark of em is bright green, there seemed to be two different kinds, one kind had the tiniest of leaves, and lots of thorns, while the other had smaller leaves and lots more thorns. (Parkinsonia Torreyana) and (Parkinsonia Microphyllia). Many of the plants here was in bloom which made one think of some tropical country instead of bein the desert. The creasote bushes had assumed giant proportions and beneath them was the daintiest of mamillarias. (Mam grahami) and there was clumps of that so called hedge hog cactus (E. C. Engelmanii) which I sure had to look out for on account of my tires. Even the different chollas had got to be tall as trees and say didja ever notice how much more it hurts when you git stuck by one of them chollas than other cactus, well I found out why, I examined their stickers under the microscope and found that the cholla spines has all got barbs on em just like a fish hook and when you pulls em out a little chunk of flesh comes with em, and this goes for every kind of cholla that I have examined yet, so whenever you insist on getting stuck by a cactus pick out the smooth spined kind, they extract better.

Well I am gettin away from my story, it would take a book to tell you all about the different interestin plants I seen on this trip so I will have to content myself with just describin the most prominent ones. What struck me most was so many different kinds of the flat leaved "prickly pears" there was green ones, yellow ones, purple ones, red ones, and lots of other flavors, all havin different kinds of spines. Mind you I was travelin in "low" most of the time now, the main reason for this bein that I "had" to, the goin was so hard, but it gave me a chanst to see a lot of things I'd never seen if I had gone any faster.

When I camped that night I had no more idea than the "Man in The Moon" of where I was. Not havin no sextant nor thermometer or nothing, I had no way of taking my bearings, so had to go by dead reckonin. Judgin from the ammt. of gasoline I had used I figured I must be near Panama, but there was still plenty in the reserve tank so I want worryin none.

Next mornin I drives a long time on good hard ground where there want no vegetation to hinder progress. This took me up over a low divide into a different lookin country which was more like the desert again, and in the middle of

the day I comes to another of them arroyos again, which was a real deep one this time. The sides of this was straight up and down, while it want no more than 20 feet across it musta been about that deep. I follored that thing for miles tryin to find a respectable crossin but all the places was too steep, till I finally comes to a place where it looked as if stock or somethin had been goin across. Here I gits out and used the shovel a long time cavin the bank off till I had what looked like a fair crossin, and it was here that the fun begins.



I puts the old flivver's nose over the bank and starts sliding down, it was so darned steep I thought we would tip over, end for end, but gits to the bottom right side up, but when I starts up the other side it was different, you see the banks of that thing was just pure soft sand, while I had power enough, the wheels just spun round, and puttin chains on just threw sand a half mile and dug me in deeper. I gits out the block and tackle but no man can pull a rope and drive a car at the same time. Old Buck tries to help, he gits out and barks at the engine, and bits the tires, then goes up the bank and howls knowin that somethin was wrong. Well it was a mechanical impossibility to git that machine out of that place, and there want nothin to be gained settin there lookin at it, so I does the next best thing by turnin the flivver down that dry creek bed and starts off hopin that I would soon find a better driveway leading out.

And here I travels mile after mile shut in that narrow canyon, not much wider than the car, there was one advantage about this, I didnt have to dodge anything, I coulnd there want room to dodge a flea, I took em as they come, rocks, brush, cactus and all. Well sir I drives down that creek bed all the rest of that day,

Continued on Page 16

A NEW BOOK BY ALWIN BERGER

By JAMES WEST, *San Rafael*

An addition to Alwin Berger's long list of contributions to the literature of the Cacti and Succulents has just come to hand. It concerns itself with the lines of evolution of the Cactaceae.*

On the basis of his life-long study of the family the author attempts to trace the lines of descent which have led to the present diversity of this protean family. Accepting K. Schumann's opinion on their common descent with the Portulacaceae and especially Aizoaceae, two families with a like strong tendency to succulence of habit, he believes that they have originated in the Southern Hemisphere, the original ancestors spreading probably from South Africa to Australasia and South America, in the same way as some of the Mesembrieae have done.

This opinion is supported by the fact, that the most primitive forms, such as *Pereskia*, *Pereskopsis* and *Tacinga* are found in the Southern Continent. The Mexican Region, though at present containing the most important Cactus flora, has reached this position through being an area in which the ancestral Cacti advanced from the warmer and moister forest and savannah conditions of the South over the emerging land-bridge of Central America into the increasingly more difficult environment of the Mexican Plateau. This presented problems of aridity, altitude and more rigorous climate, which forced an adaptable race, already pre-disposed to succulence, to develop the multiplicity of forms now existing.

In the beginning of his study the author lays great weight on the fact, that the stage of evolutionary development of existing genera is best shown by the greater or lesser primitiveness of flower and fruit, the most primitive of the three principal divisions of the family being of course the *Pereskias*. Even the more casual observer would deduce this from the fact that they bear permanent leaves and resemble other non-cactaceous plants. But to a botanist, even more convincing is the structure of flower and fruit, the ovary showing, instead of a true seed-cavity, simply a hollowing-out of the base of the pistil; also a very primitive manner of attachment of the ovules.

In the second, likewise rather primitive division, the *Opuntias*, we find the remarkable phe-

nomenon of proliferating fruit, so familiar, to those that know our deserts, in the chains of fruit on Chollas, where one fruit grows out of another, and each dropping fruit roots and produces a plant instead of scattering its seeds. This is a character which shows a low degree of advancement in the evolution of a true floral organ out of the original vegetative leaf-whorl. In *Opuntia* we also still have the presence of permanent or semi-permanent leaves and the absence of a ribbed stem which is an advanced character.

The author now goes on to the *Cereus* tribe, which he considers less homogeneous in its origin than the other two. He concludes that the *Cereoideae* are descended from four distinct ancestral stems, 1) the ancestor of the present *Rhipsalidanae*, probably a form with thin jointed stems, bearing spines, 2) that of the *Epiphyllanae*, with a tendency to form flat joints, 3) that of the *Hylocereanae*, more succulent, but still with the power of making aerial roots like the former two, and finally the ancestral form or forms from which all the rest of the cereoid genera originated, characterized by the strongly succulent stem, and definitely tending towards the "cactoid" habit.

In the *Cereoideae* we can roughly estimate the degree of evolutionary development in a genus by the increasing differentiation of the floral organs away from their vegetative characters. The development is from the primitive types with spiny, bristly or woolly ovaries and fruits towards those showing a progressive tendency to eliminate spines in favor of scales or complete nakedness.

On the other hand, the development of a distinct floral region, as the true cephalium of the *Melocacti* or the pseudo-cephalium of *Cephalocereus*, points to a later stage of evolution.

There is not space to go further into the many interesting details such as seedling-structure and the deductions drawn from it, or the observations on the colors, size and structure of flowers. The book is excellently illustrated; in particular the many diagrams (executed by the author's son, Fritz Berger), showing the probable lines of descent of the different genera for each sub-tribe in detail, also the many drawings of seedlings, are very interesting and valuable. The photographs, many of which will be already familiar to our readers, came mostly from Dr. Rose.

The author bases his work throughout on the Britton and Rose system, accepting, with some

* Die Entwicklungslinien der Kakteen, von Alwin Berger. Gustav Fischer, Jena 1926. Price RM 6.00.

Continued on page 10.

YOUR SECRETARY'S PAGE

When the CACTUS AND SUCCULENT SOCIETY OF AMERICA was formed last January it was thought that eventually we would have fifty or seventy-five members. We considered that there were at least that many cactus collectors in the western hemisphere who would enjoy each other's pleasures and stickers, hence we made the Society national in scope hoping to get them all. I doubt if we have them all as yet, although our membership is now 350, mostly from California, yet we have members in Texas, Arizona, Illinois, New Jersey, Ohio, Connecticut, Utah, Michigan, Massachusetts, Oklahoma, Pennsylvania, Canada, The Isle of Wight, England, and Germany.

Our dues are \$1.00 per calendar year or fraction thereof. If you who read this are not now a member of the Society, you are most cordially invited to become one. Send in your subscription now, we need you and you need us. Send your dollar to the undersigned or include it with your \$2.00 subscription to this magazine. You may become a patron member by paying \$5.00 a year, and a life member by paying \$100.00.

If you are interested in cactus and succulents, whether professionally or as a private collector, you will want to see our Society grow and our magazine prosper. Your membership and your subscription will make it possible. Remember dollars are the electricity that furnish the power.

The question has been asked—"What are we doing with all the money we receive for dues?" Figure it out yourself. Each member gets 12 notices a year and one membership card. Stationery, stamps, printing, etc., don't leave much of your dollar to take care of miscellaneous correspondence expenses. None of the officers receive any compensation for their work.

In behalf of your Board of Directors, I wish to thank those who made donations to the Society for the purpose of publishing the magazine and to those who payed in advance for their subscriptions. You have done a good work and we are sure you will not regret the expenditure, as you see the magazine grow and expand.

Our meetings are held for your pleasure and benefit. If you prefer entertainment other than you are getting or are in any way dissatisfied, we who are planning for your pleasure, cannot know your wishes unless you tell us. Write in your desires, and as near as possible we will give you what the majority wish, but remember it is impossible to please three hundred people with the same thing. We will try to please the majority.

All difficulties, now having been removed, we can now all work together happily and peacefully for one common end, the most pleasure and the most good for everyone.

At each meeting we will continue to raffle off free of charge, three cactus or succulent plants to members present, and one to a member outside of Los Angeles County.

R. E. WILLIS, *Secretary*,
2721 Bellevue Avenue
Los Angeles, California.

✓ ✓ ✓

During the past month Mrs. Edna Spencer of Alameda, a member with a good collection, visited our president's collection at San Fernando, Calif. She reports good work of Northern California branch of the Society and went home with new treasures of pelf and enthusiasm.

✓ ✓ ✓

Miss Alice Eastwood of the San Francisco Academy of Science also visited the President. She was on her way to a collecting trip in Arizona.

✓ ✓ ✓

Send us the name of a friend who is interested in cacti and succulent plants, but who is neither a member of the Cactus and Succulent Society nor a subscriber to our magazine, and we will send a sample copy of the Journal.

✓ ✓ ✓

We are pleased to note the formation of a Cactus and Succulent Club in Santa Barbara, California. They have elected officers for the ensuing year, and we offer our most hearty congratulation, and trust it may live long and prosper.

✓ ✓ ✓

Mrs. J. L. Criswell, our treasurer, is spending a month in Alaska. We have no idea what sort of cacti or succulent she intends to find there, but assure our readers, if there is a cactaceous plant growing in that cold climate Mrs. Criswell's keen eye will detect it, and no doubt it will be shown at the Xerophyte Show to be given by the Cactus and Succulent Society on Aug. 29, 30, and 31st at Pasadena.

✓ ✓ ✓

On June 13, 1929 Mr. Frick, Chairman of the Executive Committee of the Society, made reciprocal crosses between *Astrophytum myriostigma* and *A. asterias*. We hope they take and will watch for a report in a later issue.

THE CACTUS AND SUCCULENT SHOW

AUGUST 29, 30, 31

Something new under the sun—an all Cactus and Succulent show. It can't be done! Can't it? Watch this Society stage a show at Edwin Rust's Nursery, 352 E. Glenarm, Pasadena, for three days Aug. 29, 30, 31. The weather may be hot. Many people still away on vacation but—It will be a great show and if you have a collection and stay out we know you for a non-cooperator.

Every effort will be made to make this show

unique, educational and generally interesting. What will Mrs. A. Sherman Hoyt do? Watch her. Prizes for every class. You may win one if you have only a few plants. Our premium list will be announced later. Well known judges. Cactus men from North and South will be in attendance and experts to name all your specimens. Come to win a prize. Prepare at least one good plant. Join the Society.

1 1 1

PREPARATION FOR EXHIBITING

The show dates have been announced, and now much of the success of the Show depends upon the size and quality of the exhibit. These few suggestions on preparation are offered:

Naturally only plants in good health should be considered. The amateur will do well to establish the plants he intends to show in some sort of a container, doing your necessary transplanting now, and plunging plant (pot and all) in the ground under similar conditions to which it has been previously grown. This means that the plant will not show any lapse from transplanting, just at show time when it should look its best.

In selecting containers for plants to be exhibited select containers of all one design or at least showing a great deal of similarity. Plants approximating the same size in pots of the same size. Remember you are showing plant life NOT pots in all except special classes, and the nearer the pots blend and harmonize with the exhibit, the better the exhibit becomes!

Give the plants which are intended for show, some extra care but do not pet them to death or encourage weak unnatural growth.

Plan your exhibit NOW and after having formed a general idea of how you are going to arrange it. . . . Criticize it. Make changes in your original idea only when it lends improvement to the design. There is art in showmanship. Good fellowship too! Go determined to win, but above all don't be a poor loser. Regardless of anything else make up your mind to show something whether it be but ONE plant. Let the World realize that Southern California has many more Cacti and Succulents than it anticipates.

JOHN S. VOSBURG,

IS CACTUS COLLECTING YOUR HOBBY

A great writer and thinker and observer of human affairs said: "Everybody should have a hobby, it individualizes one." It is not necessary that the hobby should be expensive, and it is desirable to have one which the ordinary mind can appreciate, for next to the hobby itself is the joy of talking about it to others or getting some friend to share in it for a time. It keeps people young, and as the late William Tell of Austin, Texas, the oldest collector in the United States, said, "If it were not for cactus I would be dead years ago." The study, culture and collecting of cacti and succulents, is a downright sensible hobby. It is the coming hobby and is gaining day by day and every one of the present day collectors should feel proud and honored that cactus collecting is their hobby.

COL. PERRIE KEWEN.

1 1 1

A NEW BOOK BY ALWIN BERGER

Continued from page 8

amendations and additions, their new genera as valid.

The book will be an interesting addition to the Cactus library of all those able to read German, as the author's ideas are clearly and concisely presented, understandable to any amateur with moderately scientific leanings. Even the out-and-out non-scientific enthusiast might gain from it some insight into the aims of the systematic botanist, and into the why and wherefore of all this changing and piling-up of new and "hard" names, which seems both unnecessary and exasperating to the average grower of plants.

EDITORIAL PAGE

The Journal of the Cactus and Succulent Society of America launches out with the July, 1929 number as its first issue. It is our pleasure to pay tribute to Dr. N. L. Britton and Dr. J. N. Rose, whose splendid volumes, written several years ago, describing various species of cacti, and giving their technical names, give us a background for further enlightenment. From these works we gather priceless information pertaining to our study of Xerophytes.

Through the columns of this publication we wish to encourage the amateur culturist of cacti and succulents, to be of what benefit we may to the professional grower, and to furnish the general reader with interesting, entertaining and helpful material.

The Journal whole-heartedly enlists the interest and cooperation of its cactus minded readers, for undoubtedly many readable stories can be written of their own experience in gathering or nuturing various specimens. All such manuscripts will be fairly considered by the editorial staff, if mailed to the offices of the Journal. This magazine goes to press on or about the 10th of each month. Send your contribution early, in order to see it printed in the following number.

The Society is fostering a medium of exchange of rare plants, which will have its place on the pages of the Journal, and which will undoubtedly be helpful to its readers. Make Use Of It!

F. B. WALLIS.

The first issue of the official magazine of The Cactus and Succulent Society of America is presented to you without a single apology. Imperfect we know, yet we will always strive to make each issue better than the last.

We are especially indebted to Dr. Houghton, Mr. West, Mr. Barrett, Mr. Branton, Mr. Merkel, and Mrs. Voss who contributed such interesting articles. Mr. Frick, enthusiastic as ever, has contributed, not only articles and cuts, but a great deal of time in order to make this first issue a success. Mr. Wallis has devoted many of his busy days to the Journal and we are grateful for his conscientious work. To the many others we are equally appreciative for their encouragement and help. The advertisers in this issue should especially be favored for their faith in a new venture and at all times we will do what we can to show our appreciation.

The Journal will only publish articles concerning cactus and succulent plants which are of general interest to the majority and when writ-

ten for the good of the Society. In order to maintain a harmonious policy at all times, a blue pencil will be fearlessly used. We need your constructive criticisms which will never be ignored. If your ideas are contrary to other published articles, send them in because it is only thru many experiences that we can form a general conclusion. Ask questions and don't hesitate to let us know if you have a difference of opinion. At all times *The Cactaceae* by N. L. Britton and J. N. Rose will be the authority for identification; the only exceptions in which copy will not be edited to conform with this standard is when questions and stories are written in the vernacular.

It is only thru your cooperation and constructive suggestions that this Journal is possible and although you enjoy this first issue, which is always produced under handicaps, the next issue will be better if you will immediately fill in the enclosed questionnaire. We want to work with you. The response and interest has been so great that we hesitate to predict the future of this Journal. Who knows but that even the size may double,—depending entirely upon your support.

Editor: *Why such a long name to your magazine? Why not "Cactus" with Journal of the Cactus and Succulent Society of America underneath?*

HELEN McCABE, San Diego.

The Executive Committee, after much deliberation, adopted the name of this magazine for two reasons: First, this is the official magazine of a Society of three hundred and fifty members and should at all times be associated with the Society since each will be of mutual benefit; Second, since this *Journal* is the only scientific magazine dealing exclusively with cactus and succulent plants, the word "Cactus" would not be all-inclusive and scientifically correct. The word "Cactus" is emphasized because the magazine will be filed and referred to as the "Cactus Magazine."

ECHINOCACTUS GRUSONI

This plant is without doubt one of the finest and most attractive of all cacti. It is one of the first plants that attract the attention of the visitor at the Huntington Botanic Gardens at San Marino, Calif., standing out prominently with its golden colored spines from amongst the vast number of plants which compose the cactus gardens. It was named in honor of Mr. Gruson, of Magdeburg, Germany.

ARIZONA'S CONSERVATION ACT

The Cactus and Succulent Society of America desires to cooperate with Arizona in this movement. Mrs. E. E. Ellinwood, Mrs. Dale Bumstead, and Mrs. James H. McClintock, all of Phoenix, also Mrs. A. J. Chandler, of Chandler, Arizona, are the sponsors of the following Arizona law:

CHAPTER EIGHT SENATE BILL No. 3.

AN ACT

TO PROTECT NATIVE ARIZONA PLANTS FROM DESTRUCTION, MUTILATION AND REMOVAL; TO PRESCRIBE PENALTIES FOR VIOLATION; AND DECLARING AN EMERGENCY.

Be it enacted by the Legislature of the State of Arizona:

Section 1. The following plants shall constitute the protected group and the botanical names shall govern in all cases:

1. Polypodiaceae (Fern Family): *Gymnopteris triangularis* (Gymnogramme), *Adiantum capillus-veneris* (Common Maidenhair), *Woodwardia radicans* (Chain Fern), *Asplenium alternans* (Spleenwort).

2. Liliaceae (Lily Family): *Milla biflora* (Two-flowered Milla), *Lilium parryi* (Lemon Lily), *Fritillaria atropurpurea* (Purplish-brown Fritillary), *Hesperocallis undulata* (Desert Lily), *Cleistoyucca arborescens* (Joshua Tree), *Yucca whipplei* (Our Lord's Candle), *Calochortus kennedyi* (Red Mariposa Lily), *Calochortus aureus* (Yellow Mariposa Lily).

3. Iridaceae (Iris Family): *Oriolirion arizonicum* (Wild Iris).

4. Amaryllidaceae (Amaryllis Family): *Agave utahensis* (Century Plant), *Agave parryi* (Century Plant), *Agave huachuensis* (Century Plant), *Agave parvifolia* (Century Plant), *Agave coulteri* (Century Plant).

5. Ranunculaceae (Crowfoot Family): *Aquilegia chrysantha* (Columbine), *Aquilegia arizonica* (Columbine).

6. Lobeliaceae (Lobelia Family): *Lobelia splendens* (Red Lobelia).

7. Primulaceae (Primrose Family): All species of the genus *Dodecatheon* (Shooting Star), All species of the genus *Primula* (Primroses).

8. The following families and species: Polemoniaceae (Gilia Family) *Gilia aggregata* "Scarlet Gilia," Orchidaceae (Orchid Family) all species, Chenopodiaceae (Salt-bush Family) *Atriplex hymenelytra* "Desert Holly," Crasulaceae (Orpine Family) all species, Saxifragaceae (Saxifrage Family) all species, Leguminosae (Pea Family) *Cercis occidentalis* "Western Red-Bud," Leguminosae (Pea Family) *Parosela spinosa* "Smoke Tree," Simarubaceae (Quassia Family) *Holacantha emoryi* "Crucifixion Thorn," Sterculiaceae (Sterculia Family) *Fremontia californica* "Flannel Bush," "Slippery Elm," "Leatherwood."

9. Cactaceae (Cactus Family): *Lemaireocereus thurberi* (Cereus thurberi) "Organ Pipe," "Pitaya," *Lophocereus schottii* (Cereus schottii) "Senita," *Carnegiea gigantea* (Cereus giganteus) "Giant Cactus," "Saguaro," "Sahuaro," *Peinocereus greggii* (Cereus greggii) "Night Blooming Cereus," All species of the genus *Echinocereus* (Porcupine Cactus). All species of the genus *Ferocactus* (Echinocactus) "Barrel," "Niggerhead," "Bisnaga," "Visnaga." All species of the genus *Echinomastus* (Echinocactus) "Hedgehog Cactus." All species of the genus *Echinocactus* "Hedgehog Cactus." All species of the genus *Sclerocactus* (Echinocactus) "Hedgehog Cactus." All species of the genus *Coryphantha* (Mammillaria) "Pincushion

Cactus." All species of the genus *Phellosperma* (Mammillaria) "Fishhook Cactus." All species of the genus *Neomammillaria* (Mammillaria) "Fishhook Cactus." *Opuntia santa-rita* "Red Blade Prickly Pear," *Opuntia stanlyi* "Stanly's Cholla," *Opuntia parishii* "Parish's Cholla."

10. All plants growing within two hundred yards of any highway except noxious weeds.

Section 2. No person shall destroy, mutilate or remove any living plant, except seeds, of the protected group from any state or private land without a written permit from the owner; except the Arizona Commission of Agriculture and Horticulture may permit a person to take a definite number of specified plants in the protected group, for scientific or educational purposes; provided further that nothing in this act shall be construed to prevent the cleaning, clearing, or removal of plants from any canal, lateral, ditch, survey line, or public road or highway, when necessary to the full and proper use thereof.

Section 3. Nothing herein shall prevent the use of down or dead cacti for business or other purposes.

Section 4. A person violating the provisions hereof shall be guilty of a misdemeanor and fined not less than fifty dollars nor more than three hundred dollars, and each violation shall constitute a separate offense.

Section 5. All acts or parts of acts in conflict with the provisions of this act are hereby repealed.

Section 6. Whereas, the early operation of this act is necessary for the preservation of the public peace, health, and safety of the state, an emergency is hereby declared to exist; and this act is exempt from the operation of the referendum provisions of the state constitution and shall take effect and be in full force and effect from and after its passage and its approval by the governor.

Approved February 15th, 1929.

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"The demand for crestates never has been so great as at the present time," writes one of the largest dealers in cacti. Also they are becoming more scarce due to the country having been combed over by collectors. The two Opuntias shown here give an idea of the beauty attained when a cactus crestates.

RHIPSALIS

Were I to want to make a plantsman or woman happy who was a cripple or a shut-in I would start for him or her a collection of the different species of Rhipsalis. A small glass window box with a little leaf mould in the bottom and a small 8 candle power carbon lamp for heat in winter is all the equipment necessary. Here could be raised many of the kinds (Britton and Rose recognize 57 species though there are probably many more). They hardly ever are found growing except in humus or on the branches of trees. They are epiphytes like orchids and not parasites like mistletoe. They could easily become parasites if they were geologically older. In Africa many of the mistletoes are very beautiful (there are many species) and they seem in many ways to parallel the development of the Rhipsalides.

Some member of the Society should undertake the special study of this interesting genus and give us a full description some day. All cacti are indigenous or native to this continent. A few kinds of Rhipsalis are found on other continents but this is probably due to the fact that the seeds are sticky like mistletoe and have stuck to the feet of birds of passage.

FLORIDA FRUIT FLY

R. S. Woglum, entomologist of the California Fruit Growers Exchange, has just completed an intensive field survey of the Florida fruit fly situation, states that should this pest be brought to California, it is possible that this dreaded fly would get its foothold here on cactus, owing to the arid climate and cactus being the chief species of our wild plants.

Ed. Note—Dr. Houghton says the arid summer climate of California would in all probability act as a safeguard against the fruit fly. We have no summer rains as in Florida and Valencia.

S. TAKANASHI

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WATERING CACTI

By MRS. ANNA VOSS, Cleveland, Ohio.

Not a single point in the success of the cultivation of this peculiar plant is so important as the watering. On this depends the life and growth of the many pets which the cactus admirer possesses in his collection. Too much, or too little, as the case may be, is liable to result in the destruction of the plant, but in most cases too much water is given.

Many persons interested in cactus, unaware of the importance of watering, become discouraged at the loss of plant after plant, until sometimes entire collections are consumed. Naturally they give up the idea of growing cacti, but by giving the watering a little attention, other conditions considered, good results might have followed.

Under all circumstances use clean water, and confine yourself, if possible to the use of rain water only, but should such not be available, and you are compelled to use the cool hydrant water, allow it to stand in the sun for a short time to take the chill off. In winter use tepid water of about the temperature of the plant so as not to chill the plant, and never water over the plant, especially where it is liable to settle in the crown of the plant. A very slight syringing or spraying is beneficial at all times.

The most suitable time for watering cactus, depends of course on the season. In summer it is best to water in the evening, after the plant and soil have cooled off thoroughly after being exposed to the hot rays of the sun during the day; in spring and fall, morning is the most suitable, while in winter, mid-day is most advisable. During the summer or growing months, on bright sunny days it is essential to water daily, while in cloudy weather when the atmosphere is moist, water must be withheld to a certain extent, excepting probably in the case of strong growing plants. This caution is suggestion for the winter months as well as summer.

Do not keep saucers under the pots filled with water, as this method is only suitable for swamp plants or such plants as require a great deal of water; but such is not the case with cacti, as nature has provided for this in their succulent character, and they will thrive, as stated above, much better with too little than too much moisture.

Always in planting your cacti allow a reasonable amount of space from the soil to the rim of the pot for water. Do not hold the watering pot too high from the pot, so that the soil will splatter over the plant, nor water on one side only,

but pass the spout all around the plant, if possible, so that the soil will become equally saturated.

When it is possible, it is advisable in potting cacti to have the soil higher around the plant, sloping toward the pot, to prevent water from collecting around the plant, which often causes decay.

During the summer months the rule of watering the soil only may not be followed so closely, as it has been found very beneficial to water over the plant during the growing season. Of course the watering of cacti as well as all other plants, depends entirely upon circumstances. The season, the location, and the condition of the plant is always well worth taking into consideration, but that of season seems most important.

Another article on watering cacti will appear in next months Journal by Mrs. Voss.—Ed.

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QUESTIONS

WHAT ARE SUCCULENTS?

Succulents are plants which by their fleshiness or other adaptations are able to withstand drought or to live in places where fresh water is not available, as in salt marshes, etc. The phenomenon of succulency occurs principally in about fourteen families of plants, namely:

LILIACEAE, with genera Bulbine, Bowiea, Aloe, Gasteria, Apicra, Haworthia, Lomatophyllum, Xanthorrhoea, Yucca, Hesperaloe, Nolina, Dasylirion, Coharia, Dracaena, Astelia, Milligania, Cordyline and Sansevieria, each of the foregoing being a genus sometimes composed of many species.

AMARYLLIDACEAE, with genera Agave, Fourcroya, Beschorneria and Doryanthes, each with many species.

AIZOACEAE, with the interesting genus Mesembryanthemum, which Mrs. Bolus, the great South African botanist, has divided into many other genera, but which we have not yet made up our minds to follow.

POTULACCEAE, with genera Anacampseros, Portulacaria and Lewisia.

CRASSULACEAE, with genera Sedum, Sempervivum, Monanthes, Cotyledon, Bryophyllum, Kalanchoe, Crassula and Rochea.

GERANIACEAE, with genera Sarcocaulon and Geranium.

VITACEAE, with genera Cissus Cactiformis and C. Currori, etc.

PASSIFLORACEAE, with a Passion flower that grows out of rocks and looks for all the world like a Mammillaria until it flowers.

CACTACEAE, all of which are succulent.

ACCLEPEDIACEAE, which can always be told by its waxy pollen-masses like those of the orchids, with its many interesting genera Ceropegia, Echidnopsis, Hoodia, Decabelone, Trichocaulon, Freria, Piaranthus, Huerniopsis, Duvallia, Caralluma, Stapelia, Huernia and Diplocyathus.

COMPOSITAE, with genera Lychnophora, Taffalla, Odontospermum, Espeletia, Senecio and Othonna.

DIOSCORACEAE, with genera Testudinaria elephantides. The thousands of species in this genera represent some of the most curious plants in any rare collection.

DR. HOUGHTON.

WHAT IS A CACTUS?

A Cactus is a perennial plant furnished with organs called areoles, or spine-cushions. These occur in no other plants. Cacti have fruits which are berries with no partitions or divisions between the seeds. The ovary is always 1-celled. For a longer definition see Britton & Rose "The Cactaceae," Vol. I., p. 8.

Q. Will you kindly inform me why *acanthodes* is called *rostii*, *cylindraceus*, *lecontei*, *glassellii* and *ferocactus*, and when I call it *visnaga* I am informed I am right.

A. LOONE, Norwalk, Calif.

The plant that you refer to is known as *Ferocactus acanthodes* by Britton and Rose. *Echinocactus cylindraceus* was the name given by Dr. Engelmann in 1856 to the plant named *E. acanthodes* by Lemaire in 1839. The earlier name is always right. *F. rostii* is a different species, yellow spined, generally taller and more slender with appressed hairy spines between the ridges. *Ferocactus lecontei* is a different plant altogether and is sometimes difficult to tell from *F. wislizeni*. *Ferocactus viznaga* is totally different and comes from near San Luis Potosi, Mexico, while the former plants are distributed in Arizona and California. *Glassellii* is hitherto unpublished name and if the observations made on a few specimens are found to be general, although to a casual observer it may be similar to *F. acanthodes*, it will be erected into a new genus called *Platzslegma glassellii*.

We will endeavor to answer any question pertaining to Cacti and Succulents. If you have a difference of opinion on any of the answers we will appreciate yours. Questions will be answered in order received and if there is a delay in the answer you will know that further research is necessary.

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LOPHOCEREUS SCHOTTII

Continued from Page 7

most of the time goin real slow, the rest of the time goin a whole lot slower, once in a while I climbs to the top to see where I was, but everything looked the same from every viewpoint, and of course when night comes I camped right where I was, and I want worryin none about obstructin traffic either. Next mornin my highway begins to git wider, and the sides want quite so steep nor high, and soon I was able to see over the top while drivin, and off in the distance I seen a clump of green trees with a trace of smoke comin through em, and soon I seen several dohy buildins was there.

By this time the arroyo was shallow enough so that it was easy for me to cave off enough bank to drive out and in a few minutes I was stopped at the little desert ranch houses, surrounded by a bunch of the barkinest dogs I ever heard.

A old Mexican comes out and we begins a very interestin conversation, he coulndent talk a word of United States, but I could talk good Mexican. I onct took a correspondence course in it and got a certificate to prove it. Anyhow he coulndent understand any of the language I had learned.

Well after a half hours jabberin and sign language I gits the information that I was 25 miles south of the U. S. boundary line. So I decides right then and there that I had better be headin back north cause Mexico was havin one of them revolutions and I was in their country with guns on my car, and havin no permit or nothin I knew it would be unhealthy for any soldiers to find me there, so I fills my water tanks from his well and heads the flivver back north.

Not carin to follow the same highway back that I had come in on, and the country bein fairly level I starts off toward the northwest headin for a low range of hills, and the country bein quite free from brush I made good time.

I seen a big wart like hill out in the middle of this flat desert, so drove over to it to see what kind of plants was growin on it. Of course even if I did find any plants there that interested me I couldn't take samples with me cause it was in Mexico. But there want no law again takin pictures.

Well sir the top of that hill was simply covered with the very cactus I was lookin for. "Lopho Cerius schotti." The stalks on some of em was 12 feet tall, and most of them clumps had 20 to 30 stalks. It was the most beautiful cactus I had ever seen, the taller stems bein completely covered with the long white hairlike

bristles, while the shorter stems had small sharp spines like common cactus.

I had one of them automatic jiggers on my camera, so I could take my own pictures, so I sets the camera and winds it up and gits up by a bunch of that cactus and takes a photo of my self. a copy of same photo is enclosed to bear out my statements.

It sure made me sick to think that after all the miles I had traveled to get some of that cactus that it was in Mexico. Course I spose I coulda loaded up a bunch of it and said I had found it in the U. S. but my conscience would of ruined the rest of the trip, it wouldn't of been sportsmanship, twold be like a feller cheatin at solitaire.

As I was leavin there I seen a big white grave-stone at the south end of the hill, and wonderin what crazy chump was foolish enough to git buried there I went over to see what writin was on it, here is what the epitaph was. "U. S. MEXICO 371." I was in U. S. after all, my sperits went up right then, and I got real busy gettin some samples of that cactus into my car. I didnt dig up any of them plants, but simply cut off the branches I wanted. You see the branches will put out new roots in no time when planted in sand, so there want no use in cartin a lot of roots home, so in most no time I had all the cuttings I wanted and was ready to start for home. I aint goin to bother you with all the details of gettin back to the highway, altho I must tell you one funny experience.

The day after I had found my cactus I had traveled over some terrible rough country and had drove far into the night, I was also considerable worried because my gasoline was gettin low, I had been travelin in "low" for hours, and when I camped that night I was pretty blue figurin that I might have to finish my trip afoot. Well I was awake in the morning by a car goin to beat the band, and lookin up I saw this car was goin down a fine highway, and there was my tracks running parallel to this highway for mile after mile. Thats what a feller gits fer drivin at night in a strange country.

Geo.

This Journal is read by a most enthusiastic group of readers all over the United States and not a single word within its pages is overlooked.

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PURCHASE AND EXCHANGE COLUMN

Conducted by E. P. BRADBURY,
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This column is for purchases and exchanges only. For the sale of plants consult the advertisements.

Wanted Euphorbias in exchange for Death Valley Cacti including the (Grizzley Bear) *Opuntia ursina*. C. A. Ekdome, 1266 El Mirada Drive, Pasadena, Calif.

I wish to purchase a small *Cephalocereus senilis* (Old Man), please state size and price. Mrs. Anna Voss, 3307 Altoona Rd., Cleveland, Ohio.

Will exchange native Texas cacti for Haworthias and Gasterias, Robert Runyon, 812 St. Charles St., Brownsville, Texas.

I desire seeds of *Astrophytum myriostigma*, *Astrophytum ornatum* and *Mammillaria elephantidens*. Please state prices and quality. Colonel Perrie Kewen, 1243 Brunswick St., South Pasadena, Calif.

Will exchange even money value in succulents or cactus, or will purchase outright a *Astrophytum capricorne*, must be a showy plant and not less than four inches high. William Griffith, 1800 Marengo St., Los Angeles, Calif.

A CATASTROPHE

The first of May I set apart
My cactus beds to give a start,
With morning dew and sky so blue
I set about my task to do.

With trowel and spade the soil I laid
And then for a moment sought the shade,
The cat on fence was watching me
And wondering what those things could be.

The *Echinocactus* I placed therein
The *Mammillarias* as next to kin,
The cat meantime her toilet made
Was speculating on a raid.

When all at once the coast was clear
As I had stepped back to the rear,
She pounced upon *Visnaga* head
The plant survived—the cat is * * *

JOSEPH TOATH

This is a good example to discourage poetry!!

—Ed.

Would like to exchange large *Cereus* for other *Cereus* natives of other states. R. B. Whitfield, 333 N. Fairmont Blvd., Riverside, Calif.

Will exchange one *Coryphantha recurvata*, one *Neo mammillaria macedougali* for a rooted cutting of *Echinopsis cristata*. Marie Vering, 9108 Date St., Los Angeles, Calif.

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There will be no further sample copies mailed to the members since the *Journal* will be a self supporting branch of the Club's activities and only those subscribing will receive the August issue. You cannot afford to miss a single issue since they should be kept for binding and will

no doubt some day be at a premium since much of the material has never before appeared in print. The Premium List appearing in the August issue is alone worth the subscription price besides the many surprise articles. Mail the coupon now for the July 20th issue.

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